


REFRACTION IN MEDICAL EDUCATION

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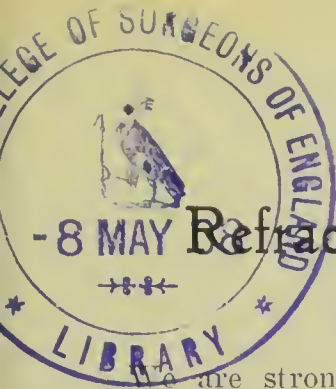


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Refraction in Medical Education

We are strongly disposed to agree with Dr. Geo. M. Gould that the long neglect of errors of refraction and consequent eye strain as a common and potent factor in the etiology of nervous and digestive disorders, and the surprisingly obstinate reluctance of the profession to concede the commonness and potency of the said factor, has had its root in the amazing ignorance of the great majority of medical men of the essentials of refraction. This class of work has for years been exclusively in the hands of the medical profession, who have been notoriously indifferent to its possibilities and negligent of its development. The average medical man neither knows, nor cares to know, anything about refraction. Ninety-nine out of a hundred could not perform the work, for the good and sufficient reason that they do not know anything at all about optics, and the further probability is that they have no intention of ever undertaking the work.

Yet in turning away, as he usually does, cases of optical refraction to the care of the oculist, the general practitioner is needlessly surrendering a most prolific and remunerative class of work which does not properly belong to the domain of the specialist: to which, on the contrary, the general practitioner is entitled by every consid-

eration of right and ethics, and for which he ought to be qualified by his education.

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There is no class of medical work which, for the expenditure of so reasonable an amount of intelligence and care, yields such uniformly satisfactory and gratifying results to both physician and patient. Unlike every other department of medical practice, refraction is an exact science, and the precision of its results serves to establish a confidence in the patient's mind which none of the less certain phases of practice can create.

It is not necessary that the refractionist should be exhaustively versed in the whole field of optics, or that he should be specially skilled in diseases of the eye! These departments properly pertain to the eye specialist, and the unfortunate thing is that they have drawn after them the simpler practice of refraction.

However, the general attitude of both faculty and students in the medical colleges assumes that the graduate practitioner will not undertake the work of refraction unless it is his intention to devote himself to the practice of a specialty in the eye, in which event he will undoubtedly supplement his medical college graduation with a course in some post-graduate school devoted to this and allied specialties. Hence the average medical student usually pays scant attention to the subject of refraction during his college term, and is rarely in a position to practice it after

graduation. If he does not purpose to follow an eye specialty, and therefore sees no reason to spend time and money in a post-graduate ocular course, he simply drops what little he did learn about refraction with the idea that it is not in his province.

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This is a very unfortunate and regrettable state of affairs. As already pointed out, it has undoubtedly been responsible for the long-continued failure to recognize the frequent and important part played by errors of refraction in the production of obscure disturbances in the nervous and digestive functions, and for the slowness of heart with which the truth has been accepted after being demonstrated. However, there is no use crying over spilt milk, or wasting time in bewailing the past. It is, of course, perfectly explicable, now that Dr. Gould has forced attention to it, that the stimulus of the ocular nervous disturbances should, if powerful enough and long enough continued, react through the cerebral and spinal centers upon the nervous tracts supplying the viscera and other parts of the body—so simple, indeed, that there is the invariable tendency to underrate the service that Dr. Gould has performed in recognizing the truth and making application of it.

Dr. Gould has now established beyond reasonable doubt that anorexia, dyspepsia, nausea, vomiting, constipation, dysmenorrhea, insomnia, nocturnal enuresis, and even epilepsy may result

from long-continued and severe eye strain. Indeed, as he pertinently remarks, "the multiformity of the effects of eye strain can only be properly realized when we understand how vital the function of vision is to every act, emotion, and thought." The urgent lesson for the present and the future is that medical schools should recognize and act upon the importance of refraction—the diagnosis and correction of refractive errors—in their general curriculum; an importance far greater than attaches to the study and practice of the rarer diseases of the eye, which invariably and quite properly drift into the province of the specialist in ocular diseases. In the light of the recently demonstrated etiological significance of eye strain in nervous and physical ailments, the medical graduate can, we should think, hardly fail to appreciate the immense value of such an addition to his therapeutic equipment and armamentarium as would be afforded by a working knowledge of refraction.



As Dr. Gould says, the true momentousness of the matter will only be perceived "when we understand how vital the function of vision is to every act, emotion, and thought." We do not believe that as yet this vital relation of vision to the body-economy is properly understood. Only recently we read an attack on Gould's assertion that scoliosis is frequently caused by oblique astigmatism, in which the writer expressed the opinion that oblique astigmatism is

more frequently and likely caused by scoliosis. On the same day we read another medical article by a professor of considerable repute, which started out with the remarkable proposition, "Of course there is not really any such thing as functional disease." Well, well, after a while the obsession of structural etiology will have had its day, and the broader, saner morrow of pathologic physiology will dawn. In that day, at all events, we look to see refraction taught with more thoroughness and diligence in medical schools.

